

Mesopelagic trawl

Profession: Collect micronekton & macrozooplankton from sub-surface at night



2-20cm or smaller organisms by agglomeration



Le Drezen (FR)

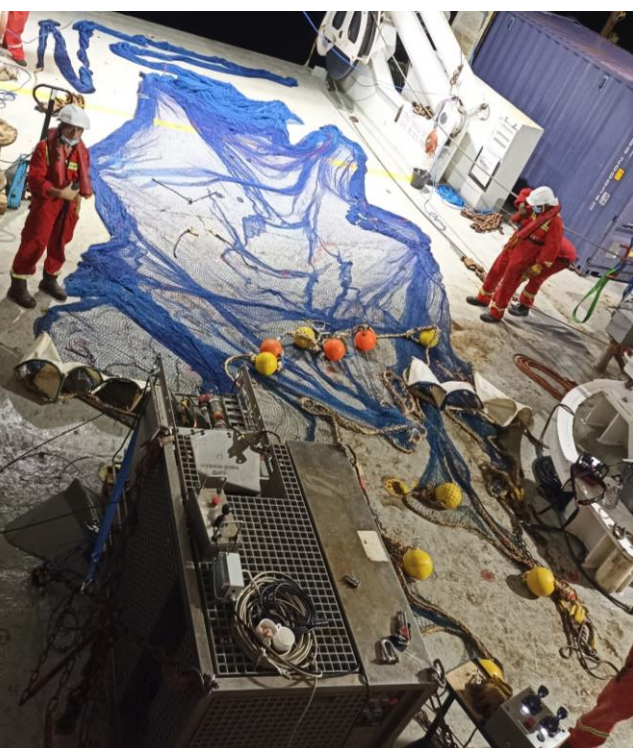


Underwater



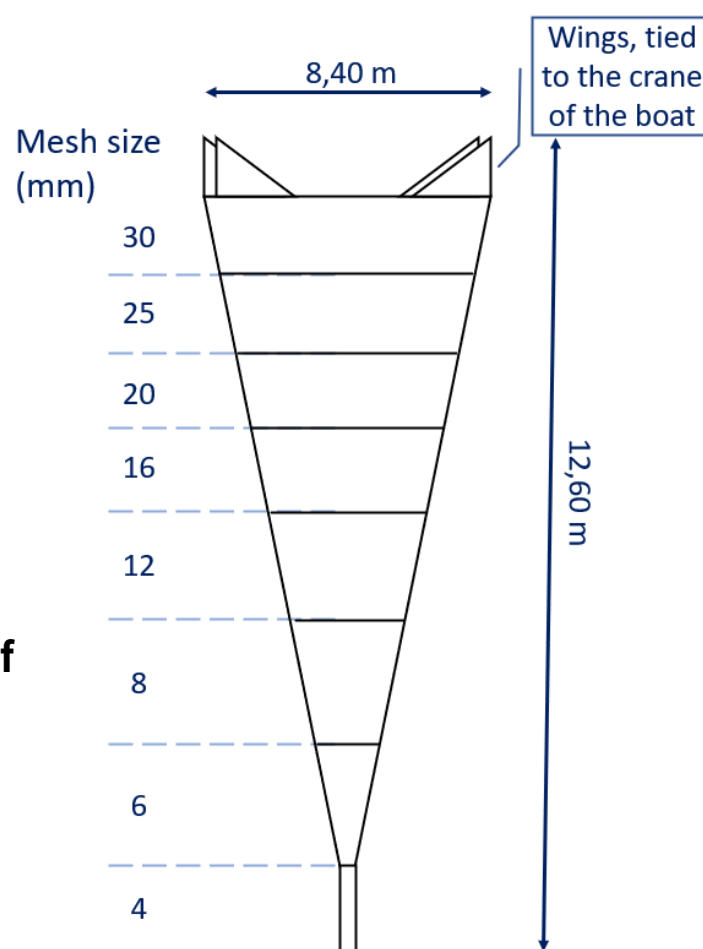
O(10 K) € without instruments

Professional overview



Mesopelagic net before its deployment
© Anne Lebourges

1. **Trawl** maintained and pulled by cranes
2. **Filters water at specific depth**, at a speed of 2 knots
3. **Chains** allows the sinking of the net and several **buoys and kites** keep it taut
4. **Collects a large variety of organisms** in the water column: small fish, crusteceans, gelatinous, larvae...



Education

- 1889 : First steam trawler
- 2004 : Fabrication of this mesopelagic net, conceived by **Marc Meillat** (Ifremer Lorient)

Skills highlights

- Coupling with acoustic data allows to create a **baseline of species' presence and abundance**
- Collecting *in-situ* organisms for **mercury measurements**
- Equiped with « Elephant seal » captors : **temperature, depth, light, fluorescence**
- Equiped with a **sensor** to determine the **distance to the surface and the bottom**

Interests & curiosities

Collect organisms being at depth during the day

One of the few techniques for sampling mesopelagic fish

Can be used by most of ships (do not need to be trawler)

Can be coupled with bio-luminescence and videos captors